

ABSTRACT OF THE DISCLOSURE

A gripping device is disclosed for a set of pinch rollers used in a wire feeder that supplies a welding operation with a consumable welding wire. The welding wire passes between the pinch rollers whereby the pinch rollers engage the wire with a gripping force and incrementally rotate to control the outflow of the wire to the welding operation. The gripping device has a first member which is displaceable relative to a second member and a spring mechanism extending between the first and second members which has at least a first and a second spring modulus. The spring mechanism produces the gripping force as the first and the second members are displaced toward one another. The gripper urges one roller of the set of pinch rollers toward the other roller of the set to engage the wire and to apply the gripping force. By including a spring with a first and second spring modulus, the gripper can apply a first range of gripping forces with the force produced by the first spring modulus and a second range of gripping forces with the force produced by the second spring modulus.